

Application Serial No.: 09/780,636
Amendment dated: August 27, 2004

Reply to Office action of: May 27, 2004
Attorney Docket No.: ARC920000113US1

REMARKS

This Amendment is in response to the Office Action of May 27, 2004. Applicants respectfully submit that all the claims presently on file are in condition for allowance, which action is earnestly solicited.

CLAIMS REJECTION UNDER 35 U.S.C. §103

Claims 1, 4 - 9, 11, 14 - 18, and 20 - 26 were rejected under 35 U.S.C. 103(a) as being unpatentable over International Patent Application WO 00/31 657 by Van Den Berghe ("PCT application") in view of Phillippe (US 6,643,624), hereinafter collectively referred to as the "cited references". Applicants respectfully traverse this rejection and submit that the claims as amended, are not obvious in view of the cited references, and are thus patentable thereover. In support of this position, Applicants submit the following arguments.

A. Brief Summary of the Present Invention

A.1. Problems addressed by present invention

Prior to presenting substantive arguments in favor of the allowability of the claims on file, it might be desirable to summarize the present invention in view of the problems it addresses. One of the problems addressed by this present invention is exemplified as follows: While the conventional e-shopping service enables the shopper to search for multiple items in a single search, it does not provide the shopper with the ability to purchase all the items in the shopping cart. Instead, the e-shopping service merely provides a list of links to the

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vendors' sites so that the shopper could link to these sites and complete the purchases, one vendor at a time.

Furthermore, while the foregoing e-shopping model could provide a combined search result and an incentive for purchasing items from multiple vendors, this purpose is practically defeated because the foregoing e-shopping model does not facilitate the shopping experience. After comparison shopping, the user must still visit each of the vendors' sites separately in order to consummate the purchases from the combined result.

Accordingly, the foregoing e-shopping model, which is representative of current e-shopping services, does not adequately address the shoppers' need for an intuitive interface with the vendors' sites to complete numerous purchases from heterogeneous vendors. In particular, shoppers are not afforded the ability to search for an item from the general population of web-based vendors. Moreover, shoppers are not provided with a true "shopping cart" that permits both a price comparison of a set of heterogeneous items and the ability to purchase those items directly from the vendors. Furthermore, the scope of heterogeneous items that may be searched is limited and does not adequately address the diverse goods and/or services that shopper may wish to purchase in a single shopping excursion.

Existing solutions to the foregoing problem propose opening up multiple instances of a browser and establish connections between the client and multiple web sites. The information "collected" in each session could then be "cut and pasted" together in a wallet and presented to the shopper for the purchasing decision. Such an approach is quite impractical because of the

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significant amount of processing resources that would be consumed by the opening up and maintaining of multiple browser instances.

A.2. Present Invention

In summary, the present invention allows the shoppers to, not only compare the price of heterogeneous items, but also to purchase these items directly without having the user visit each of the merchants' web sites individually, and without requiring the user to leave the host site to visit the plurality of heterogeneous and unrelated merchants' sites while the comparison shopping engine is automatically collecting and managing information from the plurality of heterogeneous and unrelated merchants' sites.

When used by current comparison shopping web-sites, the system of the present invention transforms those sites into active shopping agent sites. Shoppers will be able to use these shopping agent sites to perform research about products and prices. Existing web-based comparison shopping sites, for example at <http://www.mysimon.com>, can be used to perform the comparison shopping function.

In addition, the method of the invention will provide an automated buying process for all selected items within a single virtual shopping cart. A shopping agent web site using the system of the invention would become a shopping portal site, satisfying all the shopping needs of the users.

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B. The PCT Application

The PCT application generally describes a Multi-Site Shopping Cart system which enables portals and merchants to form a Cooperative Sales relationship across a computer network. It provides a system that presents the customer with a single shopping cart interface which enables her to purchase items from several distinct merchants at a single location, with just a single click of the mouse.

The system provides two components: an Application Server (APS) that controls the content of the Multi-Site cart and stores the user information; and a Parsing Proxy Server (PPS) that acts as an Intermediary between the user and the merchants, when the user is browsing the merchant Web sites.

At the beginning of the users shopping session, the APS serves pages with links to the merchant Web sites. These links are routed through the PPS in the following manner: the user's browser requests a page from the PPS, which in turns requests a page from the merchant site, processes this page, and then serves it to the browser. The minimum level of processing done by the PPS consists of finding the links in the HTML page of the merchant and ensuring that all these links are modified to route through the PPS. This means that, as the user clicks on links in the page, all of the browser requests are sent to the PPS.

If the merchant pages contain some information on the items selected by the user, the PPS extracts this information and sends it to the APS, using the HTTP protocol. If the page to be served is the merchant's shopping cart page, the PPS performs a re-direct to the APS, and the APS displays the Multi-Site

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Shopping Cart page which includes the item just selected on the merchant site.

When the user is ready to execute the purchase, she can select a sub-set of her shopping cart. She can then click on a "buy" button. The APS instructs the PPS to re-create, on the merchant sites, the shopping carts corresponding to the selected items, and then to place an order using the user's billing and shipping information. This interaction is performed by a bot, which is a component of the PPS, either by simulating the user's clicks on the merchant site or by using the merchant's own API, if available. Alternatively, the user can go to the merchant's web site through the PPS, and perform a manual checkout process as implemented by the merchant. In that case, the PPS will help the user by filling the forms with the user's information.

C. Philippe et al.

Phillippe is generally concerned with a method and a system for integrating transaction mechanisms over multiple internet sites. Reference is made to the title. More specifically, **Philippe describes a method for effecting transactions across multiple vendors** in an integrated environment, wherein the user may purchase each of a plurality of items the user finds independent of the vendors. The user's selections are received from the user and mapped to selected set of vendors. When the user is finished, she invokes a check-out application to fill in one or many order entry forms for each of the relevant vendors whose goods the user selected during the course of shopping. The check-out application uses common information, such as name, address and credit card number, previously provided by the user in order to fill in the order

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entry forms for each vendor without requiring the user to fill in these forms. Finally, the check-out application tracks confirmation numbers in a common information store. Reference is made to the Abstract.

D. Independent Claims 1, 9, 11, and 18

Applicants will now present arguments in support of the allowance of independent claims 1, 9, 11, and 18, and the claims dependent thereon, over the cited references. Claim 1, as a representative claim, recites the following elements that are not described in the cited references:

"1. A system for automating an electronic-commerce transaction using a virtual shopping cart initiated at a host site, comprising:
a merchant schema database that contains information about schemas used by a plurality of heterogeneous and unrelated merchants' sites;

a shopping cart manager that creates the virtual shopping cart based on a user's search query, and that monitors the content of the virtual shopping cart;

a comparison shopping engine that automatically collects and manages information from the plurality of heterogeneous and unrelated merchants' sites, across multiple independent transaction sessions initiated by the host site, based on the user's search query, and that **returns a corresponding comparative search result, without requiring the user to leave the host site to visit** the plurality of heterogeneous and unrelated merchants' sites **while the comparison shopping engine is automatically collecting and managing information from the plurality of heterogeneous and unrelated merchants' sites**; and

a protocol broker module that selectively communicates with the plurality of heterogeneous and unrelated merchants' sites using at least one of the schemas in the merchant schema database, in order to execute a transaction for each item in the virtual shopping cart."
(Emphasis added).

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Applicants agree with the Examiner regarding the missing elements from Van Den Berghe et al. (the PCT application). The missing elements are quite important to the proper implementation of the present invention in that (1) they provide the consumer with a virtual shopping cart, to enable the consumer to have a broad access to the entire Internet; and (2) they enable the consumer to conduct his/her shopping without having to leave the host site.

Similarly, Philippe does not disclose the use of a virtual shopping cart. Instead, Philippe refers to the use of a Virtual Database Management System ("VDBMS") technology, which is summarized as follows:

"In a co-owned, co-pending U.S. patent application Ser. No. 08/724,923, entitled "Method and Apparatus for Structuring the Querying and Interpretation of Semistructured Information." Ashish Gupta, et. al. introduced Virtual Database Management System ("VDBMS") technology in which structure is added to semi-structured data, thereby making the data searchable using known techniques. Further, VDBMS technology enables data from multiple sites to be integrated together and made searchable via a common mechanism. This technology is applicable to non-web sources such as legacy data sources in Relational Database Management Systems ("RDBMS"), text files, feeds in systems like SII, word and other text processor documents, UNIX file systems, and so forth. The technology's broad applicability in integrating a multiplicity of sources has been proven in the market in publicly available services." Reference is made to column 2, lines 48 - 55, with emphasis added.

A virtual shopping cart cannot be equated to Philippe's Virtual Database Management System technology, as understood, for the following reasons. According to the present invention, a single host provides the user with a virtual shopping cart for the duration of the shopping session. The virtual shopping cart accompanies the user during the shopping session.

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Philippe's Virtual Database Management System enables data from multiple sites to be integrated together; however, the user must first procure the data from the multiple sites so that the data may be integrated and then searched. As a result, the Virtual Database Management System does not accompany the shopper, but is rather akin to a database (as its name implies) that collects the data.

In support of Applicants' position that **Philippe does not teach allowing the shopper to perform shopping without leaving the host site so that the shopper will perform shopping from numerous sources without having to directly interface with these source, and by limiting the shopper's direct interface to the single host.** Reference is made to the following excerpt from Philippe:

"Multiple purchases across different vendors are integrated based upon the concept of a "virtual check-out counter," from which all transactions are consummated. The virtual checkout counter enables the user to make payments at a single point even though returns and product question transactions are handled by individual vendor sites. FIG. 3B depicts a flowchart 303 of steps in virtual check-out counter processing. In a step 322, **the user performs a search for items of interest using a search program as is known in the art.** Then, in a step 324, a result page depicting the results of the search performed in step 322, such as result page 206 of FIG. 2D, is displayed to the user ... Flowchart 305 of FIG. 3C depicts the transaction processing of step 334 in greater detail. Otherwise, when no further user selections remain, processing returns." Column 7, lines 30-60, with emphasis added.

The foregoing excerpt clarifies that the shopper performs searches as is known in the art, that is the shopper will need to visit each merchant's site independently, and collect the data from numerous merchants, so that the Virtual Database Management System could integrate the collected data, as described above.

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These missing elements are important for a proper implementation of the present invention, and thus, the absence of these important elements does not permit the finding that the claimed invention as a whole would have been obvious in view of the cited references.

To conclude, independent claim 1 is allowable, and thus the claims dependent thereon is also allowable. In addition, claims 9, 11, and 18 are also allowable for containing similar distinguishing elements and limitations to claim 1, and thus these claims and the claims dependent thereon are allowable.

CONCLUSION

All the claims presently on file in the present application are in condition for immediate allowance, and such action is respectfully requested. If it is felt for any reason that direct communication would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned at the below-listed telephone number.

Respectfully submitted,



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